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# THE UNIVERSITY OF STRASBOURG

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COMBINED INTELLIGENCE OBJECTIVES  
SUB-COMMITTEE

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THE UNIVERSITY OF STRASBOURG

29 December 1944

Reported by

W. P. ROOP,  
Capt., USN. (Navy ALSOS)

CIOB Black List Items

11- Torpedoes

24 -Medical.

COMBINED INTELLIGENCE OBJECTIVES  
SUB-COMMITTEE  
G-2 DIVISION, SHAEP (Rear) APO-413

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 Captain W.P. ROOP, USN, (Navy ALSOS)  
 Captain CROMARTY, (Army ALSOS)

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UNITED STATES NAVY  
Paris, France.Report on Visit to the University of Strasbourg.

Enclosure: (1) Personal- und Vorlesungs-Verzeichnis. Winter Semester 1944-45.

Introduction.

This is the first institution of learning to become accessible to the ALSOS Mission as a channel for exploration of German scientific achievement in relation to the war. It occupies a unique position geographically and academically. The opportunity which it offers for pursuing the purposes of ALSOS will not be duplicated even east of the Rhine if hostile attitudes are encountered there as expected. At the same time the French, Belgian and Dutch Universities are much further removed from direct understanding of German war effort in scientific lines. The German schools at Bonn and Cologne are likely to be as severely damaged as that at Aachen. Even aside from the specific intelligence targets it presents, the University of Strasbourg therefore deserves special attention as a port of entry into scientific Germany.

General Narrative.

At the time of first contact made by ALSOS about 28 November, the administration of the University was completely disrupted. The specific objectives in view at that time, which are explained in separate reports, did not permit waiting for entry by normal channels and a very limited use of force had to be made. It was restricted to the necessary minimum and things were left substantially undisturbed. A statement was made that U. S. troops had been quartered in University buildings, specifically a battalion of infantry under Major Rathburn. No evidence of this was seen at the time of my visit on 11 December, but a certain amount of confusion and scattering of papers was found. This might have occurred at any time after 25 November and might have been done by any of many different persons. A request had been made by Lt.Col. Pash for the University authorities to deny



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access to certain rooms at No.5 Quai Koch. At the time of my visit on 16 December, it was explained to me that the request could not be complied with, and I saw no reason for reproach.

On 11 December, accompanied by Dr. H.J.E. Reid and Webster, McMM2c, I was admitted to the main building, where we found four professors, Dr. Victor Coulon-Tauber, Dr. Karl Mugler, Dr. Emil Rinck and Dr. Paul Wernert, all Alsatian members of the staff of the Reichs-Universitaet. They received us cordially and one of them led us to the office of the Rector of the Universite de Strasbourg, M. Prelot. The Rector himself was absent, but we were most cordially received by his secretary, M.Marthelot, who directed us to other offices of the Universite.

He explained that a large part of the faculty had established itself temporarily in Clermont-Ferrand, that the Reichs-Universitaet had made a new start in 1940, but at the time of the liberation many professors who had come in from Germany had evacuated. The exiled members of the Universite were now free to return and in the meantime a number of Alsatian members of the staff who had remained through both changes were carrying on, mainly with courses of popular instruction.

On 15 December, Dr. Reid and I visited, first, the Physics Laboratory of the Medical Research Institute with Capt. Cromarty of Army ALSOS, and then the office of the Registrar at 5 Quai Koch, where we found M. Benjamin Ritzenthaler in charge, his chief Georg Armbruster having been interned. He put us in touch with Dr. Emil Rinck, Professor of Chemistry, and Robert Mueller, master mechanician. In the company of these two we visited the Institute of Physics, the Institute of Applied Physics and the war laboratories established at Fort Fransecky.

On 16 December finally, the morning was spent at the library. The German director, Dr. Karl J. Hartmann, had returned to Göttingen, and the Administrateur de la Bibliotheque Nationale et Universitaire, M. Ern. Wickersheimer, had just occupied the office. He received us well and we were given every courtesy by a librarian, Mme. Heitz, who had remained throughout the German occupation.

A good idea of the character of the Reichs-Universitaet is given by Encl.(1). The issue of Autumn 1941 welcomed students again after 25 years interm (during which the buildings had been occupied by the Universite). The beginniag in 1941 was modest,

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but each semester since that time showed an increase in the number of students and extent of activities. There appears to have been no new building construction, however, except as noted later, and the process has been one of replacement of French by German activity with incidental shifts of emphasis.

The general importance of the situation for ALSOS lies in the fact that a large fraction of the present staff in residence has a close acquaintance with an important group of German scientists. More detailed information about the work of the Germans is obtained there now than anywhere else.

The specialized developments during the German occupation had a definite relation to the war. The Institute of Applied Physics is a new creation. The work of the Physical Institute was given a very definite wartime significance. Most important of all, perhaps, is the newly-founded Research Institute of the Medical Faculty, with its three branches, Biology, Physics and Chemistry, housed in a building in the grounds of the Buerger-spital. It was here that a high tension generator of capacity 1.5 million volts was completed in February 1944. The culmination of wartime laboratory work was reached in an establishment at Fort Fransecky about 10 km. north of the city. These various enterprises will now be separately described.

The Library.

The Library is one of the more important secondary continental collections, with more than a million volumes. In addition to material of historical and local interest, current publications, including those on technical subjects, have been regularly purchased. The building is suitable for its purposes according to standards somewhat below the highest level. The services of indexing, circulation, care of the books and the like seem from U.S. points of view, inadequate, though not lacking altogether. A separate service to undergraduate students was maintained in the main building of the university, about on the scale of the "browsing rooms" of our larger university libraries. Each of the separate scientific institutes had a working collection of books of its own. In the case of the Medical Institute, at least, this was outside the cognizance of the central library altogether.

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The main building had received a direct bomb hit which opened up the main reading room to the weather. The books were stowed in the basement and are mostly not exposed to rapid deterioration for the time being. A small amount of work was being done in improvement of conditions of stowage. The catalog is intact.

Recent acquisitions had been removed. It was said that in principle all books bought with German funds had been taken to Göttingen. In the case of the Medical Institute, a collection of say 2000 volumes of key periodicals still remained at Fort Fransecky. The recent acquisitions were boxed for shipment and are still lying in the basement at the Institute building at the Buerger-Spital. Evacuation of recent acquisitions from other Institutes was more complete but still not wholly so. A fair number of recent periodicals was seen in the Physikalischen Institute although vacant shelves remained where books had been removed.

The Institut fuer Angewandte Physik.

The Institut fuer Angewandte Physik at 14 Waltherstrasse is a large private house taken over for laboratory use. The director, Dr. Hiedemann, joined the staff before 1941 and carried on his experiments in underwater supersonics as a continuation of earlier work. Instruction in courses 183 to 187, page 62, enclosure (1) was also presumably carried on here. The adjoining house had been completely demolished, presumably by bomb, but No. 14 is substantially intact. Active research, however, seemed to have been transferred to Fort Fransecky.

The Physikalisches Institut.

The Physikalisches Institut is a large and substantial building in a conspicuous place on the main campus. A prospectus illustrating its use following the last war is enclosed. The building is undamaged but appeared not to have had much use. It is doubtful if the courses numbered 169 to 187 on pages 61 and 62, enclosure (1) were justified by the number of students. The rooms used by Dr. Finkelburg for office space and for experimental research were visited. Some papers were found and these were left for closer examination in future. All significant apparatus had been removed. Dr. Weiszicker's office still contained books and papers needing further study. The instrument



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shop was nearly or quite intact and in use by the master mechanic, Mr. Müller. The rest of the building also should be thoroughly examined for clues as to the nature of the German work done there.

The Medical Research Institute.

The building devoted to the use of the Research Institute of the Medical Faculty was not so designated on maps prior to the German occupation. It lies just south of the Maternity Bldg. in the Buerger-Spital, quite across the city from the University. The inspiration for this institute came from Dr. Fleischmann who finally gave it a turn quite unusual among medical centers in nuclear physics from 1942 on. The specialties of the others are not so clearly defined. The high tension generator is of very recent construction and has had only about 100 hours of operation. It adjoins the Institute buildings and is designed as an auxiliary to its work. It narrowly escaped destruction by a bomb which left a crater between the two buildings, but the generator appears to be intact.

Fort Fransecky.

At Fort Fransecky two laboratories were found, one for experiments in supersonics, one for biological work. This fort is a strong point lying about 10 km. north of the city. It has massive constructions of earth and masonry in the interior of which are many large rooms and wide corridors. The spaces actually used had natural light and air through windows opening into the court forming the center of the fort. The working space thus needed cover for these windows to give complete protection against blast, but were well-provided against direct hits.

The fort was captured by surprise infantry action and evidences of the fight were still to be seen. It was understood that a large part of the garrison was taken prisoner.

Work in the supersonic laboratory had been suspended a month or so before the capture, and the space used for quartering troops. It appeared however that the biological laboratory had continued in use nearly up to the end.

Supersonic (Underwater) Laboratory: Fort Fransecky.

The principal material equipment remaining in the supersonic laboratory is a tank about 8 x 8 x 4 feet in depth, fitted with

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highly absorbent interior surfaces. Frames were provided for positioning the generator and receiver in the tank. The experiments made in this tank were understood to be directed toward measurements of the transparency of metallic screens of varying composition for sound waves of supersonic frequency. These screens were made up on the spot and a number of furnaces and other pieces of equipment used in their preparation were still to be seen. A number of pieces of electronic equipment said to have been removed from the Maginot communications system had been assembled, possibly with a view to salvaging parts for use in these tests. A torpedo head was found in the Institute of Applied Physics and it was said that this had been fitted with a supersonic quartz generator and the cavity closed with a cap of the material under test. The cavity was filled with oil during the test.

The information on frequency at which these tests were made is not definite and the generator was not available. Mention was made of a quartz plate a few millimeters thick which would suggest a frequency of the order of a half million cycles per second. Possibly an estimate might be made from the type of absorbing assembly used. It was made up of small irregular plates of cork about 1/4 inch thick and 1 to 2 inches across. These were mounted in cement so that each piece of cork projected edgewise into the water for a distance of one to two inches. The cork plates were set in a spacing of about one inch or less from each other, in a random arrangement. The whole assembly thus presented to incident sound waves a solid backing surface faced by a zone in which the water was broken up by cavities (filled with cork). The zone was one to two inches deep and the cavities, arranged in an irregular pattern, occupied say 20 to 25 percent of the volume of the zone.

The reason for suspension of work in the supersonics laboratory at Fort Fransecky could not be determined.

Biological Laboratory: Fort Fransecky.

The other line of work at the fort had absorbed considerably larger effort and seemed to have continued nearly up to the time of the Allied occupation. The chief items of equipment which indicated the nature of the work being done were three glass enclosures which seem to have been used for isolation of animals under experiment and observation. A number of pieces of equipment commonly used in hospitals or in biological laboratories

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remained, but it appeared that important portable items had been removed, including an electron microscope. A small brick incinerator, with a fire box about 10 by 30 inches might have been used for disposal of infectious material, as was rumored. A good collection of periodicals on physics and biological and medical subjects still remained.

Examination of this laboratory and interrogation of persons who might know of details of the work done there was still continuing at this writing, and results will have to be reported separately. It is not yet possible to say exactly what was the nature of the results which were desired.

The reason for choice of this location for such work is also not wholly clear. Security of some sort naturally lies at the bottom of it, but it is hard to see what threat to security is better resisted at the fort than in the grounds of the Buerger-Spital. The most plausible suggestion is that the bomb which landed near the Institute led to the belief that this special laboratory was regarded by the Allies as a target of high priority. So far as is known this is not the case. Another possibility is that Alsatian personnel in the hospital was not trusted and a more isolated location was desired. The price paid for whatever security was achieved was a rather large measure of inconvenience. The suspension of the supersonic work at the fort may show that this price was found too high.

University of Strasbourg: Personnel.

Various personalities involved will now be taken up.

Egon Hiedemann. Born 1 Feb. 1900 at Cologne. Dozent at Cologne University from 1931, professor 1938. At Strasbourg from 1941. Evacuated to Lae Constance; Forschungsstelle fuer Angewandte Physik, Salem/Bodensee. His speciality is supersonics, and the effect of high frequency sound waves on suspended particles.

His work in organizing the Institute for Applied Physics had an early beginning and continued actively up to evacuation said to have occurred in October, 1944. He is author of a book on "Grundlagen und Ergebnisse der Ultraschallforschung", published in 1939; it has not been possible to get a copy of this book. Copies of reprints of articles in scientific periodicals



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found in his office indicate specialization on experimental study of properties and effects of supersonic waves, especially on small particles suspended in air. Work on transparency of metals as carried on at Fort Fransecky seems to have been a digression.

Otto Bickenbach. Not listed in Kürschner's Gelehrten Kalender, 1941. Ausserordentliche (AO) Professor of Internal Medicine at Strasbourg 24 November 1941. Chief of the Biological section of the Medical Research Institute. Lectured on pathological physiology in 1941-42. Believed to have been active at Fort Fransecky, and to have evacuated to Tauber-Bischofsheim near Würzburg, where the Turnhalle of the Frankenschule is utilized.

Rudolf Fleischmann. Born 1 May 1903 at Erlangen. Dozent at Heidelberg from 1938. A.O. professor of physics on the Medical Faculty at Strasbourg from 1 November 1941. Section Chief for Physics at the Research Institute. Specialized in nuclear Physics. Has written several comprehensive accounts of current work on artificial radioactivity, jointly with W. Bothe, from 1943 onward, as well as periodical accounts of original work in the same field. Sponsored the construction of the high tension generator at the Bürger-Spital. Said to have been interned and available for interrogation.

Friedrich Weygand. Not listed in Kürschner. Section Chief for chemistry in the Research Institute of the Medical Faculty. His special work is not very well-defined and he had only limited duties of instruction, but is listed in enclosure (1) also as an A.O. professor in the Medical Faculty since 1943. Possibly he is engaged on secret projects, or has Nazi administrative functions.

Wolfgang Lehmann. Born in Halle 31 August 1905. Dozent at Breslau from 1939, at Strasbourg from 1943, where he became Director of the Institute for "Race Biology". Participated in ethnologic field work in Malaya from 1927. Specialized in Human Genetics, Race Hygiene, Politics of Population. His institute was housed with the Research Institute. He serves on the examining board for medical degrees. Perhaps he had Nazi administrative functions.

Wolfgang Finkelnburg. Born at Bonn 5 June 1905. Dozent at Karlsruhe 1932, A.O. professor Technische Hochschule Darmstadt

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1938. At Strasbourg from 15 October 1942. Evacuated, possibly to Heidelberg. Engaged to marry Eleanore Schülen of Wördlingen 1938. Specialized in spectroscopy. Published a book on continuous spectra in 1938. A manuscript of a book on electric arcs was seen and left in his office. He was quite active in instruction in experimental physics. Under date of 1944 he issued a second edition of a pamphlet on Physics, of 48 pages, in popular vein. He had also worked on the subject of detonation and was said to take a special interest in wartime application of physics. However no closer indication of the nature of his work was obtained.

Carl Friederich Freiherr von Weizsäcker. Born at Kiel, 28 June 1912, son of the German ambassador to the Vatican. Dozent at Berlin 1937 and assistant in the Kaiser Wilhelm Institute of Physics at Dahlem. A.O. Professor at Strasbourg 1 January 1943. Director of the Institute of Theoretical Physics. Published a book in 1937 on nuclear physics and has written articles on transformation of the elements in the stars. Participated in varied academic activities. Described as a philosopher, a man of ascetic rather than practical habits.

Karl Julius Hartmann. Born at Homberg 9 March 1893. Director of the University Library at Göttingen 1935, at Strasbourg 1942. Evacuated to Göttingen. Commended by his Alsatian assistant as a man of moderation.

Other members of the German Staff, are Johannes Stein, Dean of Medicine, interned. Georg Armbruster, Inspector, interned. Eugen Haagen, Director of the Institute of Hygiene.

Alsatian members of the staff, with whom helpful contacts were made are as follows:

Emil Rinck, Professor of Chemistry.

Robert Möller, Master mechanic in the Institute of Applied Physics.

Benjamin Ritzenthaler, Assistant in the Business Office.

Mme P.H. Heitz, Librarian, 24 rue J.J. Rousseau.

French officers of the University already present in the city are:

M. Prelot, the Recteur, who is also to be found at 13 Quai d'Orsay, Paris.

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M. Marthelot, his secretary, at 6 Rue de la Toussaint.  
M. Wickersheimer, administrateur de la bibliotheque.

A print of the list of members of the university of Strasbourg in exile at Clermont-Ferrand may be examined at:-

Office of CIOS Secretariat, SHAEF (Rear)  
Office of JIC, Washington.  
Office of Scientific Intelligence Advisory Section,  
G-2 Division, SHAEF (Main)

W. P. ROOP  
Capt., USN, Navy ALSOS

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ENCLOSURE (1)

Enclosure (1) consisting of Personal-Und Vorlesungs-Verzeichnis Winter-Semester 1944/1945 Reichsunwersitat Strasburg has been omitted from the reproduced copies of this report. Those sections referred to in the report have been extracted and printed below.

Complete copies of the document may be examined at:

Office of CIOS Secretariat, SHAEF (rear)

Office of J.I.C. Washington.

Office of Scientific Intelligence Advisory Section, G-2  
Division, SHAEF (Main)

3. THEORITISCHE PHYSIK

- |     |                             |               |
|-----|-----------------------------|---------------|
| 169 | Mechanik, Mo Di Mi Do 10-11 | v. Weizsacker |
| 170 | Naturphilosophis, Mo 15-17  | v. Weizsacker |

Uebungen:

- |     |   |               |
|-----|---|---------------|
| 171 | Uebungen zur Mechanik, Fr 10-11   | v. Weizsäcker |
| 172 | Seminar für Theoretische Physik, Mo 17-19<br>pr. u. gr.   | v. Weizsäcker |
| 168 | Physikalisches Kolloquium (14-tägig), ge-<br>meinsam mit Finkelburg, Fleischmann,<br>Hellerich, Heidemann, Mi 17-19, gr | v. Weizsäcker |

4. EXPERIMENTALPHYSIK

- |     |   |             |
|-----|---|-------------|
| 173 | Experimentalphysik II (Elektrizität, Magne-<br>tismus, Optik) für Mediziner und Natur-<br>wissenschaftler, Di Mi Do 11-12 | Finkelburg  |
| 174 | Ergänzungen zur Experimentalphysik für<br>Studierende der Naturwissenschaften, Mo 8-10                                    | Finkelburg  |
| 175 | Physik der Atomkerne, 2 st., Zeit nach Ver-<br>einbarung  | Fleischmann |

Uebungen:

- |     |  |            |
|-----|--|------------|
| 176 | *Physikalisches Praktikum für Anfänger (Na-<br>turwissenschaftler ab 2. Semester,) Do 14-<br>17, Sa 8-11 | Finkelburg |
| 177 | *Physikalisches Praktikum für Mediziner des<br>2. Semester (14-tägig), Di 14-18                          | Finkelburg |
| 178 | Physikalisches Praktikum für Pharmazeuten<br>(ab 3. Semester), Sa 8-12                                   | Finkelburg |
| 179 | *Physikalisches Praktikum für Fortgeschrit-<br>tene, 12 st., Zeit nach Vereinbarung, pr.                 | Finkelburg |
| 180 | Anleitung zu selbständigen wissenschaft-<br>lichen Arbeiten, ganztägig, Mo-Sa, pr. u.<br>gr.             | Finkelburg |



- |     |  |                           |
|-----|--|---------------------------|
| 181 | Seminar über Experimentalphysik, Mi 17-19<br>pr. u. gr.  | Finkelburg                |
| 188 | Anleitung zu wissenschaftlichen Arbeiten im<br>Forschungsinstitut der Medizinischen Fakultät,<br>ganztätig, pr. u. gr. | Fleischmann               |
| 168 | Physikalisches Kolloquium, (14-tätig), ge-<br>meinsam mit Hellerich, Hiedemann, v.<br>Weizsacker, Mi 17-19, gr.        | Finkelburg<br>Fleischmann |

### 5. ANGEWANDTE PHYSIK

- |     |                                |           |
|-----|--------------------------------|-----------|
| 183 | Angewandte Physik, Di Do 11-12 | Hiedemann |
| 184 | Schwingungslehre, Mi 11-1      | Hiedemann |

#### Uebungen:

- |     |   |           |
|-----|---|-----------|
| 185 | *Physikalisch-Technisches Praktikum, 12 st<br>Zeit nach Vereinbarung, pr. | Hiedemann |
| 186 | Uebungen zur Angewandten Physik, Di 12-13<br>pr. u. gr.                   | Hiedemann |
| 187 | Anleitung zu wissenschaftlichen Arbeiten<br>ganztätig, Mo-Sa, pr. u. gr.  | Hiedemann |



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